

# Interactive Data Language (IDL)

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Interactive Data Language (IDL) is a programming language for data analysis, visualization, and cross-platform application development. IDL combines tools for many types of projects, from "quick-look," interactive analysis and display to large-scale commercial programming projects.

NAS currently has IDL development licenses that allow 10 users to use the tool at the same time. Each license allows a single user to run multiple IDL sessions with the same session display simultaneously. Follow these steps to take advantage of this feature:

1. Use SSH to connect to a PFE.
2. Check the DISPLAY variable of the PFE, and launch multiple xterm sessions to run in the background. For example:

```
pfe25% echo $DISPLAY  
pfe25:83.0
```

```
pfe25% xterm&  
pfe25% xterm&  
pfe25% xterm&
```

3. In each xterm window, check the DISPLAY variable to confirm that it has the same number that was shown in the original window. Load an IDL module, then launch the idl command. For example:

```
pfe25% echo $DISPLAY  
pfe25:83.0  
pfe25% module load idl/8.1  
pfe25% idl  
IDL>
```

In the example above, a single user occupies only one IDL license rather than three licenses by ensuring that the IDL sessions are running in three separate xterm windows that all have the same DISPLAY number.

Use one of the following methods to view how many licenses are currently in use:

- Run `/u/scicon/tools/bin/check_licenses -i`
- Load an IDL module and run the `lmstat -a` command

**WARNING:** You must quit IDL and release the license when you are done. Keeping the license in use when you are not actively using IDL prevents others who need access to IDL from doing useful work.

If you cannot use IDL because all licenses are currently being used, try again at a later time. If you notice that multiple licenses are occupied by the same user, please contact the NAS Control Room at (800) 331-8737, (650) 604-4444, or by email at [support@nas.nasa.gov](mailto:support@nas.nasa.gov).

For more information, see:

- [NAS IDL License Policy](#)
- [IDL Documentation](#)
- [IDL Programming Language \(Wikipedia\)](#)

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Article ID: 119

Last updated: 24 Feb, 2020

Updated by: Moyer M.

Revision: 20

Post-Processing Data -> Licensed Application Software -> Interactive Data Language (IDL)

<https://www.nas.nasa.gov/hecc/support/kb/entry/119/>